

Title (en)
SYSTEMS AND METHODS FOR EYE TRACKING IN VIRTUAL REALITY AND AUGMENTED REALITY APPLICATIONS

Title (de)
SYSTEME UND VERFAHREN ZUR AUGENVERFOLGUNG IN ANWENDUNGEN VON VIRTUELLER REALITÄT UND ERWEITERTER REALITÄT

Title (fr)
SYSTÈMES ET PROCÉDÉS D'OCULOMÉTRIE DANS DES APPLICATIONS DE RÉALITÉ VIRTUELLE ET DE RÉALITÉ AUGMENTÉE

Publication
EP 3752897 B1 20230802 (EN)

Application
EP 19705518 A 20190215

Priority

- US 201862631196 P 20180215
- EP 2019053853 W 20190215

Abstract (en)
[origin: US2019253700A1] In one embodiment, a wearable apparatus is provided which may include a holographic film disposed on the wearable apparatus, an eye tracking device including an image sensor and an illuminator, and one or more processors. The processors may be configured to activate the illuminator to illuminate the holographic film and capture, with the image sensor, an image of at least a portion of the holographic film while the holographic film is illuminated. The processors may also be configured to determine a characteristic of the holographic film based on the image and determine, based on the characteristic, a location or an orientation of the image sensor relative to the holographic film. The processors may further be configured to change, based on the location or the orientation of the image sensor relative to the holographic film, at least one calibration parameter of the image sensor.

IPC 8 full level
G06F 3/01 (2006.01); **G02B 27/00** (2006.01); **G02B 27/01** (2006.01)

CPC (source: CN EP US)
G02B 27/0093 (2013.01 - EP US); **G02B 27/0172** (2013.01 - CN); **G06F 3/012** (2013.01 - US); **G06F 3/013** (2013.01 - CN EP US); **G06T 7/50** (2016.12 - US); **G06T 7/80** (2016.12 - US); **G06V 10/141** (2022.01 - CN); **G06V 10/147** (2022.01 - CN); **G06V 40/19** (2022.01 - CN); **H04N 17/002** (2013.01 - US); **H04N 23/56** (2023.01 - US); **G02B 2027/0138** (2013.01 - CN EP US); **G02B 2027/0187** (2013.01 - CN); **G06T 2207/30168** (2013.01 - US); **G06T 2207/30204** (2013.01 - US); **G06T 2207/30244** (2013.01 - US)

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
US 2019253700 A1 20190815; CN 110162165 A 20190823; CN 110162165 B 20240621; CN 110162166 A 20190823; CN 110162167 A 20190823; CN 110162167 B 20240503; CN 110162168 A 20190823; CN 110162168 B 20240220; CN 110163917 A 20190823; CN 210166824 U 20200320; EP 3752897 A1 20201223; EP 3752897 B1 20230802; ES 2957329 T3 20240117; US 11622103 B2 20230404; US 11665333 B2 20230530; US 11917126 B2 20240227; US 2021076026 A1 20210311; US 2021109591 A1 20210415; US 2023217008 A1 20230706; WO 2019158709 A1 20190822

DOCDB simple family (application)
US 201816232398 A 20181226; CN 201910117784 A 20190215; CN 201910117806 A 20190215; CN 201910117811 A 20190215; CN 201910118134 A 20190215; CN 201910118137 A 20190215; CN 201920205087 U 20190215; EP 19705518 A 20190215; EP 2019053853 W 20190215; ES 19705518 T 20190215; US 201916970549 A 20190215; US 202016917657 A 20200630; US 202318174079 A 20230224